

Pending claims 1-16 in this application are canceled, new claims 17-28 are added. The specification is amended to correct a typographical error on page 8, wherein the word "by" appears instead of the word --be--. This amendment is clear and apparent from the context.

Having studied the second Office Action, the Applicants state the following:

Re: Examiner's numbered paragraph 1 As regards the drawings, the claims 1 - 11 of the previous versions of the Claims, relate to the method as the subject of the invention, that is why the drawings possess an illustrative character, and the Applicants believe, they disclose the method of the game in a very detailed way. Applicants respectfully assert that the requirements that the Examiner is making are not necessary to understand the invention and should not be imposed on the applicants.

At the same time, there exists a possibility that the authors of the invention didn't understand some of the Examiner's questions due to some natural discrepancies in the Russian and the English languages. That is why the Applicants suggest are canceling claims 12 - 16, concerning the realization of devices, thus limiting the Application to the declared method, as subject of the invention, which, to the Applicants' opinion, would exclude all the objections regarding the drawings the that Examiner raises, since applications on methods can be filed without presentation of any drawings, if the description of the method is set forth in the documents of the application in a

clear and explicit way. The drawings are not necessary for understanding of the invention. Also, this is supported by the Manual of Patent Examining Procedure, which, at MPEP §601.01(f), states:

35 U.S.C. 113 (first sentence) in turn provides that an "applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented."

and also states:

It has been PTO practice to treat an application that contains at least one process or method claim as an application for which a drawing is not necessary for an understanding of the invention under 35 U.S.C. 113 (first sentence). The same practice has been followed in composition applications.

Simultaneously, the drawings illustrate the declared method and the earlier applied devices very clearly. The documents of the application explicitly disclose the game event registration technical means, besides, there were corresponding explanations with reference to information sources in the first response to the Office Action.

Fig. 3 of the corrected drawings shows "space vehicles with different technical data". The concept "different technical data" characterizes the functional operation, which is characteristic of method as subject of the invention. We do not see a possibility to illustrate a concept, qualitative in its essence, in drawings, relating to methods. Fig. 5 shows a "technogenic object, relating to space waste, and the capturing of space waste on reaching its location" (see reference numeral 3 in the drawing). The specification clearly states

"The game event assessment means 3 may be, for instance, space objects of technogenic origin, such as a

satellite or space waste. The at least one game event assessment means 3 may be a space object of natural origin, such as a planet or small space objects." (specification page 8, lines 11-14, as amended).

However, since the Applicants have excluded the term "technogenic" in the previous response to the Office Action, as such term, corresponding to the meaning "manmade" in Russian, evidently does not exist in the English language, the Applicant has excluded this term from the Claims of the Invention after the first Office Action. However, even so, it is clear from the context of the specification, that technogenic objects relate to manmade objects. For example, at page 4, lines 24 and 25, page 5, lines 13 and 14, page 6, line 7, page 8, line 12, page 12, line 24, the object of technogenic origin is referred to as "space waste". At page 6, line 6, and page 12, line 24, it is referred to a being a space vehicle. At page 8, line 12, it can be a satellite. Page 13, lines 10 and 11 says they are "objects of artificial, for instance, technogenic . . . origin." This is repeated at the same page, lines 19 and 20 and page 17, lines 16 and 17 and page 18, lines 2 and 3.

Fig. 6 illustrates a "space vehicle, which has gone the longest distance to the game event assessment means". Fig. 7 shows a "space vehicle, which has gone the shortest distance to the game event assessment means". Fig. 8 illustrates the "external surface of a space vehicle" and the "external surface divided into game fields, the game elements being objects capable of randomly moving in space, the game event occurrence is registered on hitting a game field by a movable object". In Response to Office action SN 09/601,913 Page 7 [V177rtoa/Dec 2001]

Claim 12 "a game event occurrence registration facility being adapted to detect a game event occurrence in space outside the Earth and display the game event occurrence on the Earth" is known from prior art and is shown in the figure schematically. Such facility is used in the Russian mission management center, as well as in the US spacecraft operation center. We believe the Examiner would not demand to show in the figures, illustrating the invention, all the equipment, used for spacecraft operation and for spacecraft monitoring systems. It is practically impossible. However, as applicants are sincerely attempting to further the prosecution of this application, the Applicants agree to exclude the concept of technical means from the Claims on the method, since all the technical means for monitoring and operating spacecrafts are known and in their essence are not the subject of the present invention pertinent to method. The Applicants do not introduce any new features.

Re: Examiner's numbered paragraph 2 The Applicants have already presented the corrected drawings in response to the first Office Action. However, if the Examiner considers that any additional details should be introduced in these drawings, we ask to particularly specify what he would like to see in the drawings. The Applicants have made all the changes in the drawings according with the Examiner's instructions in the previous Office Action.

Regarding the claim rejections, specifically, regarding the Examiner's statement that "claims 1-16 are objected to under 35 U.S.C. §112, first paragraph, as containing subject matter which

was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention", found both in the first and second Office Actions, applicants respectfully traverse and mention the following.

The authors of the invention have tens of years' work experience in cosmonautics. It is evident to them that one, skilled in the art to which the present invention pertains, or with which it is most nearly connected, could make or use the present invention. Besides, having repeatedly met their American colleagues, the authors know, that their skills in the art to which the present invention pertains, are not less than ours, otherwise the American colleagues, in contrast to specialists from other countries, would not have achieved a considerable progress in this technical sphere. Moreover, the documents of the application and the previous response to the Office Action present a wide range of sources of information, from which it is evident that all the technical means used for the present invention are not secret, before filing the application there were already published a number of different methods and means of reaching planets, registration meteoric particles, etc. But nobody has suggested using these methods for realization of space games, since in recent past it was not yet evident, and the realization of such games was impossible because of the confrontation of political systems. However, in the future, perhaps in the near future, it would be possible to realize such games with the help of already known means, which have been used

in cosmonautics for a long time to operate space flights or for registration of torrents of meteoric particles. Though we have already received a Patent for the invention No.2169029 in Russia, registered on June 20, 2001, and the specification, that we offered in the application, was fully accepted by the Examiner without any changes, but in order to exclude incomprehension with the U.S. Examiner, applicants, to further the prosecution, are ready to limit the number of our patent claims in the specification, as stated below.

The applicants have, by the amendments herein, made the subject of the invention the method and have excluded all the devices from the Claims. Simultaneously we agree to eliminate incomprehension with the Examiner on various phrases and concepts, which might have different synonymical meaning and to clarify the Claims on the methods, explicitly stating, when game elements are space vehicles, and when - particles. At the same time we have changed the concept, translated as "the game event assessment means", to its equivalent - "the game event assessment element", so that there would not arise confusion between concepts "technical means" and an element, which can be of technical or of natural origin, i.e. not manmade. Since the technical means for monitoring and operating space vehicles or for registration of a particle hitting the outside surface of a space vehicle are also known, we also exclude from the Claims on the methods the very concept "technical means".

In the description of the documents of the application, it is clearly explained in what way one, skilled in the art to which

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the present invention pertains, or with which it is most nearly connected, could make the present invention according the corrected claims. Simultaneously we draw the Examiner's attention to the fact that the Applicants have not introduced any features, that are new or missing in the previous documents of the application, to the new Claims, where only the working is changed for better understanding and for excluding miscomprehension.

Re: Examiner's numbered paragraph 6, Claim Rejections - 35 USC §112 Claims 17-28 of the new Claims are in compliance with 35 U.S.C. §112, second paragraph.

Concerning the earlier applied for Claims 1, 3 and 5-6, which further define "the game event assessment means", it is asked: What is the game event assessment means? What is its function(s)? What is the function and process? What is being assessed?

The additional claims of the new Claims disclose in a detailed way the concept of a game event assessment element. It can be either a planet, or an earlier launched space vehicle, or space waste, or some other elements, e.g. asteroids, etc. The choice of a game event assessment element is determined by the game rules, which are set by the organizer of the game. The function and process of a game event assessment element is to determine the starting point, a peculiar finish for game results assessment and selection of the winner according to the space location of space vehicles in relation to the game event assessment element. In some cases it can be the reaching of a

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planet, or a space vehicle passing on the shortest distance from a game event assessment element, or capturing of the said element by a space vehicle, e.g. capturing of space waste (a peculiar space waste collection, so that the game brings additional benefit). The most important is that the said element is in outer space outside the planet Earth.

Concerning the Claims 2-10 and 12-16, which further define "space vehicles" and a "technogenic object", the Examiner asked: What are the various technical characteristics? How are they used? How many space vehicles? What is the relationship to the game event assessment means? What is technogenic? What is a technogenic object? Also, these claims further define the "shortest distance to the game event assessment device". Where is the start and the end point? What is the game event assessment device? What is the purpose?

The answers: The term "technogenic object" has been earlier excluded after the first Office Action. The reasons for the exclusion were drawn in the response to the first Office Action and earlier in the present text of the second Applicants' response. All released space vehicles, as well as automobiles, have different technical characteristics, e.g. in their speed and maneuverability. Since the players are people, they can choose for themselves a space vehicle they want to make a bet on in advance. However, as the Examiner had a question, this feature was excluded from the new wording of the Claims.

There can be two or more space vehicles. The game event assessment element (means) is used for assessment of location of



space vehicles in relation to this element (see the explanations above).

The concept "technogenic object" has already been earlier excluded.

The shortest distance to the game event assessment element does not mean that a space vehicle has to reach, for example, a planet or capture space waste. For example, two space vehicles participating in the contest were launched to a rather distant planet. None of them reached the planet, both passed it. In this case the winner is a space vehicle, which has gone the shortest distance from the game event assessment element, which is the planet. The start and the end points can be located anywhere. For example, on the planet Earth, if both space vehicles are launched from it. Or they can be on another planet, if they are launched from the Moon to the Earth, for example. They can be on different orbits in relation to the Earth, if space vehicles are launched to some other planet in the space.

It is asked 'What is the purpose of the game event assessment device?' The purpose of the game event assessment device is described in a detailed way in the documents of the application and the responses to the Office Action.

As regarding panels and detector instruments that can be used, the necessary explanations were given in the previous response to the Office Action. Everything is described in a very detailed way on pages 14-20 of the documents of the application. It follows from the description that the panels are in a special way oriented in space, i.e. they are on the space vehicle outer

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surface, not dimmed-out by other constructions, e.g. all panels are parallel to the plane of the orbit. However, even if the panels were in the dimmed-out parts, it would not make difference for space particles, randomly moving in space, since the particles move in different directions. On the one side the construction is dimmed, on the other it is not. Registered is the hitting of game fields by particles. The game fields of the panel have equal characteristics of the possibility of being hit by space particles, including equal area, absence or equal degree of dimming by construction elements, thickness, detectors' sensibility, the time of operation, the ability of recovery, the replacement by reserve panels. Evidently, detectors identical in their technical characteristics are to be chosen. To provide a start pulse required to register an SP by the instruments, different physical mechanisms can be employed: mechanisms of inducing a charge and current in a film capacitor and in piezotransducer, film layer breakdown burst, acoustic impulse propagation in a detector after a space particle hit. The detectors (SP) per se may be instruments used in the international Venus-Halley project («Foton», «Dusma», SP-2).

As it was earlier stated in the first response, the acoustic and electric effects in piezotransducer at film layer breakdown are described in, for example, "McDonnel, J.A.M. et al. (1984) An Empirical Penetration Equation for Thin Metallic Films Used in Capture Cell Techniques". Nature, 309, pp. 237-240.

Therefore all the mentioned processes are feasible, stated in the application and the previous response in such a detailed

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way, that the Applicants have no idea of what additional technical data for realization of the invention requires the Examiner and what additional examples are needed. It is respectfully submitted that the invention is more than adequately described.

Applicants respectfully believe that the level of detail that the Examiner is asking to be added to the claims is not required in order for claims to be in compliance with 35 U.S.C. §112.

Concerning Claim 11, the phrase "such as" renders the Claim indefinite, as it is not clear, whether the restrictions following this phrase are part of the invention applied for. See MPEP 2173.05 (d).

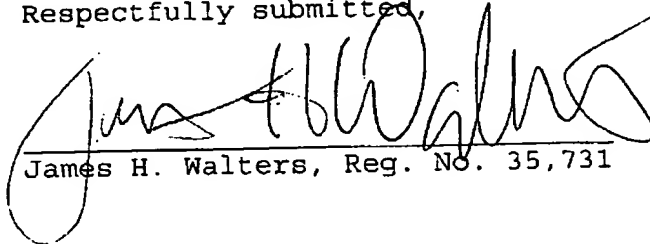
This fair remark of the Examiner was taken into consideration after the first Office Action, and is also followed in the second response to the Office Action.

Thus, after taking into consideration the second Office Action, we present new Claims as noted above, and the Applicants believe that the explanations and responses provided herein above address all the Examiner's objections and concerns.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice thereof is respectfully solicited. The Examiner is urged to contact applicants' attorney at 503-224-0115 if there are any questions.

Respectfully submitted,

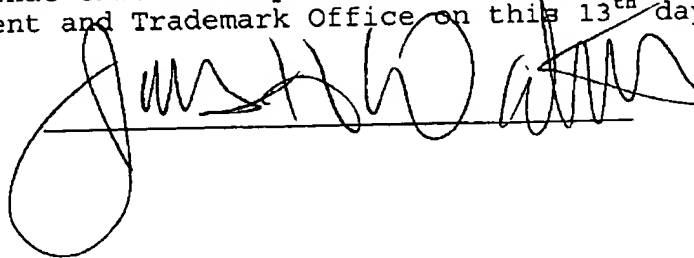


James H. Walters, Reg. No. 35,731

802  
DELLETT AND WALTERS  
Suite 1101  
310 S.W. Fourth Avenue  
Portland, Oregon 97204 US  
(503) 224-0115  
DOCKET: V-177

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Markup sheet showing amendment to specification

Page 8, lines 11-14, this paragraph is amended as follows:

The game event assessment means 3 may [by] be, for instance, space objects of technogenic origin, such as a satellite or space waste. The at least one game event assessment means 3 may be a space object of natural origin, such as a planet or small space objects.